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## NOTICE OF ALLOWANCE AND FEE(S) DUE

23557 7590 07728/2009
SALIWANCHIK LLOYD & SALIWANCHIK
A PROFESSIONAL ASSOCIATION
PO Box 142950

GAINESVILLE, FL 32614

EXAMINER
HISSONG, BRUCE D
ART UNIT PAPER NUMBER

1646 DATE MAILED: 07/28/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/539,827	10/24/2005	Thomas Schwarz	BB-149	5864	

TITLE OF INVENTION: METHODS OF TREATING SKIN DISORDERS ASSOCIATED WITH UV RADIATION WITH INTERLEUKIN-18

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

indicated unless correct maintenance fee notifica	ed below or directed otl	ng the Patent, advance of nerwise in Block 1, by (	a) specifying a new co	crespond	lence address;	and/or	(b) indicating a sep	arate "	TEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)  23557 7590 07(28/2009)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
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10/539,827 TITLE OF INVENTION	10/24/2005 i: METHODS OF TREA	TING SKIN DISORDER	Thomas Schwarz	H UV R	ADIATION W	TTH I	BB-149 NTERLEUKIN-18		5864
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EXAM	INER	ART UNIT	CLASS-SUBCLASS	$\neg$					
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"Fee Address" ind PTO/SB/47; Rev 03- Number is required.  3. ASSIGNEE NAME A	condence address (or Cha B/122) attached. lication (or "Fee Address 302 or more recent) attach and RESIDENCE DAT. less an assignee is ident th in 37 CFR 3.11. Comp	inge of Correspondence		o to 3 regitatively, ingle firm or agent) attorneys be printed type) e patent, an assign	gistered patent n (having as a ) and the name s or agents. If n ed.  If an assigne nment.	memb s of up so nam	er a 2	locume	ent has been filed for
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☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			A check is enclosed.      Payment by credit cal. Form PTO-2038 is attached.      The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).						
	ns SMALL ENTITY state	as. See 37 CFR 1.27.	b. Applicant is no						
interest as shown by the	records of the United Sta	uired) will not be accepte tes Patent and Trademark	u moin anyone other thi Office.	un the ap	pucant; a regis	acred a	morney or agent; or t	ue assi	gace or other party in
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



### UNITED STATES PATENT AND TRADEMARK OFFICE

#### NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

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	PO Box 142950					
GAINESVILLE	, FL 32614	TO A COST DATA DE COMPO (2000)				

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 248 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 248 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

### Application No. Applicant(s) 10/539 827 SCHWARZ ET AL. Notice of Allowability Examiner Art Unit Bruce D. Hissong, Ph.D. 1646 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the request for continued examination received on 5/7/2009. The allowed claim(s) is/are 1 and 5-21 (re-numbered as claims 1-18). 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 🔯 All b) ☐ Some\* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. T Examiner's Statement of Reasons for Allowance of Biological Material Other . /Gary B. Nickol /

Supervisory Patent Examiner, Art Unit 1646

Application/Control Number: 10/539,827

Art Unit: 1646

#### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David R. Saliwanchik on 6/22/2009 and 7/10/2009.

#### In the claims:

- In claim 1, please amend the phrase "A method for preventing or treating a disorder" to instead read "A method for treating a disorder".
- 2. Please amend claim 19 to read "A method for treating skin that has been damaged by UV radiation, wherein said method comprises inducing the nucleotide excision repair (NER) pathway by administering, to a patient in need of such treatment, an effective amount of interleukin-18."
- Please amend claim 8 to read "The method according to claim 5, wherein the UVradiation originates from natural sunlight."
- Please amend claim 10 to read "The method according to claim 1, wherein the administration is systemic".
- 5. Please add new claim 20, which reads "The method according to claim 5, wherein the UV-radiation originates from artificial sunlight."
- Please add new claim 21, which reads "The method according to claim 1, wherein the administration is topical."

Application/Control Number: 10/539,827

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7. Please amend claim 11 to read "The method according to claim 1, wherein the administration occurs by way of administering a pharmaceutically acceptable carrier and/or by injection."

- Please amend claim 13 to read "The method according to claim 21, wherein the topical administration occurs in a dose range of from 1 ng/ml to 1000 ng/ml."
- 9. Please amend claim 14 to read "The method according to claim 10, wherein the systemic administration occurs in a dose range of from 0.1 μg/kg bodyweight to 100 μg/kg bodyweight."
- 10. Please amend claim 15 to read "The method according to claim 14, wherein the administration occurs once to eight times daily."
- 11. Please amend claim 16 to read "The method according to claim 9, wherein the administration occurs before, during, and/or after a patient is exposed to UV-radiation."
- 12. Please amend claim 18 to read "The method of claim 11, wherein the administration is by intracutaneous injection of a pharmaceutically acceptable carrier."

## In the specification:

Please amend the title to read "Methods of treating skin disorders associated with UV radiation with interleukin-18"

#### Advisory Information:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce D. Hissong, Ph.D., whose telephone number is (571)272-3324. The examiner can normally be reached M-F from 8:30 am - 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol, Ph.D., can be reached at (571) 272-0835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1646

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bruce D. Hissong
Art Unit 1646
/Gary B. Nickol /
Supervisory Patent Examiner, Art Unit 1646